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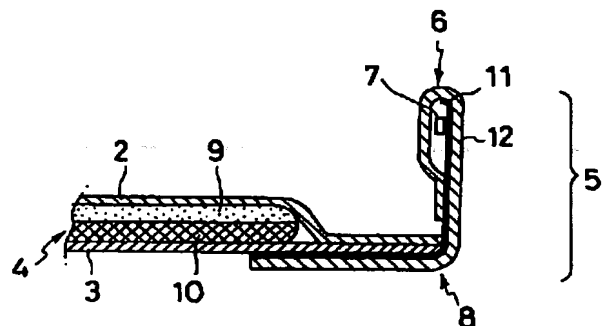
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(54) 【考案の名称】 吸収性物品

(57) 【要約】

【目的】 むれ、漏れを防止し、すぐれた肌触りを有する吸収性物品。

【構成】 液透過性トップシートと、液不透過性、透湿性バックシートと、両シート間に介在された吸収体と、該吸収体の横方向両側縁から外側へ延出し、吸収体上に折り返えられて縦方向両端部が固定され、自由縁に伸縮弾性部材が設けられているサイドフラップを有し、該サイドフラップは、5 μ m 以上20 μ m 未満の厚さの不透水性シート内層と目付10~25 g/cm² の不織布外層とからなる複合シートで形成されている。



1

【実用新案登録請求の範囲】

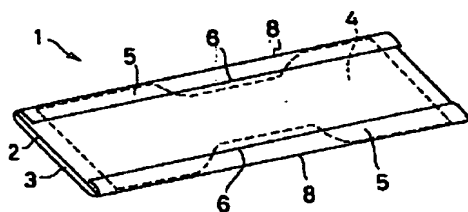
【請求項 1】 液透過性トップシートと液不透過性、透湿性バックシートと両シート間に介在された吸収体と、該吸収体の横方向両側縁から外側へ延出しており、吸収体上に折り返して折り返し部の縦方向両端部を接合したフラップを有し、そのフラップ自由縁に伸縮弾性部材を設けた吸収性物品において、前記吸収体の横方向両側縁から同方向外側へ延出するサイドフラップ部分を、前記トップシート及び前記バックシートとは別体の $5\mu\text{m}$ 以上、 $20\mu\text{m}$ 未満の不透水性シート内層と目付 $10\sim 25\text{g}/\text{m}^2$ の不織布外層との複合シートで形成することを特徴とする吸収性物品。

【図面の簡単な説明】

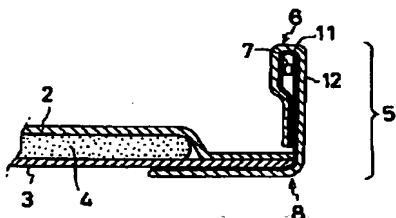
【図 1】 本考案の物品の伸張状態での斜視図

【図 2】 本考案の物品の自由な状態での斜視図

【図 1】



【図 3】



2

【図 3】 図 2 の X-X' 線断面図

【図 4】 本考案の物品の別の実施例の断面図

【符号の説明】

1 : 吸収性物品

2 : トップシート

3 : バックシート

4 : 吸収体

5 : サイドフラップ

6 : サイドフラップ自由縁

7 : 伸縮弾性部材

8 : サイドフラップ基端部

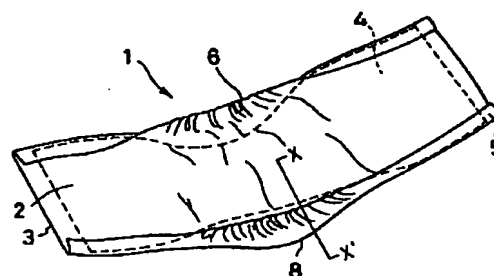
9 : 上層吸収体

10 : 下層吸収体

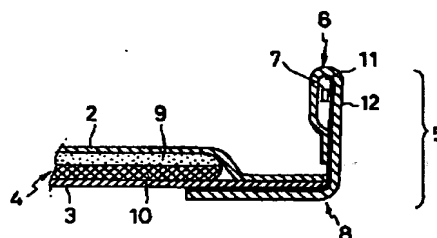
11 : サイドフラップ部の不透水性シート

12 : サイドフラップ部の不織布

【図 2】



【図 4】



【手続補正書】

【提出日】平成 5 年 10 月 27 日

【手続補正 3】

【補正対象書類名】明細書

【補正対象項目名】図 3

【補正方法】変更

【補正内容】

【図 3】 図 2 の X-X' 線断面図

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【考案の詳細な説明】**【0001】****【産業上の利用分野】**

本考案は乳児用、又は失禁者用に供されるおむつ、パッド、生理用ナプキン等の吸収性物品に関する。

【0002】**【従来の技術】**

使いすて失禁プロテクタ又はオムツにおいて、吸収体の横方向両側縁から外方向へ延出するサイドフラップの外側縁に弾性部材を取り付け、該サイドフラップを上面へ折り返すとともに、その折り返し部の縦方向両端を接合して横方向両側に排泄物を受止するポケットを設けたものが特公平 3-57782 号公報に開示されている。またサイドフラップをトップシート及びバックシートとは別体の通気防水性シートから形成する吸収性物品が、実公平 4-33848 号公報に開示されている。

【0003】**【考案が解決しようとする課題】**

上記従来技術の特公平 3-57782 号公報に記載の使いすて失禁プロテクタ又はおむつなどは、排泄物の漏れ防止及び肌触り等の使用感が完全ではなかった。またサイドフラップは吸収体の外まで延在させたバックシートで形成しているので、バックシートにプラスチックシートを用いると、直接肌にプラスチックシートが触れるため肌触りが良くなく、該プラスチックシートに肌触りを改善するために不織布等のシートを複合した場合にも、使用者の激しい動きにも耐えるシート強度が必要なため、プラスチックシートがごわごわして不快感を与える。また通気性、透湿性がないため蒸れ防止についてなにもなされていない。

【0004】

また実公平 4-33848 号公報に記載のサイドフラップをトップシート及びバックシートとは別体の通気防水性を有するシートから成る吸収性物品においては、サイドフラップ部の蒸れ防止について改善がなされているが、吸収性物品のうちの広い面積を占めているバックシートについてはなにもなされていないため

、実質的に蒸れ防止の効果が認められない。

【0005】

また通気性を付与するために不織布等を用いているので、防水効果は不十分であり、漏れに関する改善が成されていない。加えて、通気性を有するフィルムを用いる場合には、一般に通気性を有さないフィルムに比べフィルム強度が下がるため、同程度のフィルム強度を維持するためにフィルムを厚くすることが必要となり、サイドフラップがごわごわして使用者に不快感を与える。本考案はこのような問題点を解決することを目的とするものである。

【0006】

【課題を解決するための手段】

上記目的を達成するために、本考案は、サイドフラップ部にトップシート及びバックシートとは別体の、バックシートよりも薄く、柔らかく、肌触りのよい $5\mu\text{m}$ 以上、 $20\mu\text{m}$ 未満の不透水性シートと目付 $10\sim 25\text{g}/\text{m}^2$ の不織布との複合シートを用い、使用者の肌に触れる外層が不織布となるサイドフラップを形成し、さらにバックシートに透湿性シートを用いることを特徴とするものである。

【0007】

本考案を詳細に説明すると、液透過性トップシートと液不透過性、透湿性バックシートと両シート間に介在された吸収体と、該吸収体の横方向両側縁から同方向外側へ延出するサイドフラップ部を吸収体上に折り返し、折り返し部の縦方向両端部を接合したフラップを有し、そのフラップ自由縁に伸縮弾性部材を設けた吸収性物品において、

前記吸収体の横方向両側縁から同方向外側へ延出するサイドフラップ部分を、前記トップシート及び前記バックシートとは別体の $5\mu\text{m}$ 以上、 $20\mu\text{m}$ 未満の不透水性シートと目付 $10\sim 25\text{g}/\text{m}^2$ の不織布との複合シートで形成するものである。

【0008】

【作用】

上記構成の本考案の吸収性物品においては、液不透過性サイドフラップは、そ

の長手方向中央部が立ち上がっておむつ着用者の体との間を密封すると共に、サイドフラップの自由縁とフラップ基端部分の間に小袋を形成して漏れを防ぐ。また液不透過性サイドフラップには、バックシートよりも薄く、柔らかい不透水性シートを内側にし、着用者の肌に触れる外側を不織布として形成されている肌触りの良好なシートを使用しているのごわごわすることなく着用者に不快感を与えない。

【0009】

【実施例】

以下に、本考案の実施例を示す図面を参照して、更に詳しく説明するが、本考案はこれらの実施例により何等制限されるものではない。

図1は本考案の実施例に示す吸収性物品1の伸張状態での斜視図である。図1の吸収性物品1はトップシート2と、バックシート3と、吸収体4と、吸収体の横方向両側縁から同方向外側へ延出すると共に弾性部材を取り付けたバックシートとは別体のサイドフラップ5とを含む。図2は図1で示した本考案の吸収性物品の自由な状態での斜視図である。図3は図2のX-X'線断面図である。

【0010】

図3及び図4に示すように、トップシート2と吸収体4の側縁から外側へ延出している。また図1及び図2に示すように、トップシート2とバックシート3は吸収体4の縦方向両端から同方向へ延出しており、トップシート2の外端部とバックシート3の外端部は互いに接着されている。図3及び図4に示すように、サイドフラップ5の液不透過性複合シートは吸収体の側縁より外側に延出するようにバックシート3につなぎ合わされ、吸収体4の側縁にそって吸収体上に折り返され、折り返し部の縦方向両端部を接合してフラップを形成し、そのフラップ自由縁6に伸縮弾性部材7を伸張状態で配置し、この伸縮弾性部材7を拘束しないように放置すると、伸縮弾性部材7が自由に収縮して伸縮弾性部材7の配置されたフラップの自由縁6は基端8から立ち上がり吸収体から離間してギャザーのある開口部となり小袋を形成することとなる。

【0011】

ここで使用されるトップシート2はポリエチレン、ポリプロピレン、その他の

熱可塑性繊維からなる液透過性不織布を用いる。

フラップの自由縁に配置された伸縮弾性部材 7 はウレタンフィルム、ウレタン糸、ウレタンフォーム、糸ゴム等を用いる。また前記伸縮弾性部材 7 はそれぞれ伸張状態でフラップの自由縁に配置されホットメルト接着剤により接着固定されている。

【0012】

吸収体 4 はフラップパルプを主材に高吸収性ポリマーを併用したものが好ましく、その他吸収紙単位又は熱融着性繊維などの混合物や積層物が用いられる。吸収体の構造は砂時計型でも矩型でもよいが、砂時計型の方がより良好なフィット性を得られる。また上層にフラップパルプ、下層にフラップパルプと高吸収性ポリマーを混合又は積層し、ティッシュで包み込んだ積層構造とすることが好ましい。この場合の吸収体 4 は上層吸収体 9 は縦方向中央部の少なくとも股下部分において幅狭く砂時計型に形成し、下層吸収体 10 は上層吸収体の狭い幅と同幅の矩型をなすよう積層されていることが好ましい。

【0013】

バックシート 3 にポリエチレンシートに微孔を設けて透湿性を付与した、液不透過性、透湿性ポリエチレンシートが用いられる。また熱可塑性樹脂にフィラーを加えて延伸して透湿性や通気性を付与した液不透過性シートなどを用いても蒸れる心配がなく快適である。バックシート 5 は $20 \sim 40 \mu\text{m}$ 厚みであることが必要である。

【0014】

サイドフラップ 5 の液不透過性複合シートとしては、図 3 及び図 4 に示すように、肌触りを良くするための不織布 12 が脚周りの肌に触れる側に配置されるように、バックシート 3 よりも厚みが薄く柔らかいポリエチレンシート 11 などを内側につつま込むように貼合わせた複合材が用いられる。この場合複合シートのポリエチレンシート 11 は $5 \mu\text{m}$ 以上 $20 \mu\text{m}$ 未満で不織布 12 の目付は $10 \sim 25 \text{ g/m}^2$ であることが必要である。

【0015】

図 3 で示すように、ポリエチレンシート 11 と不織布 12 の複合シートの貼合

わせ方は、不織布内面全面にポリエチレンフィルムを貼合わせた複合シートであってもよいし、また、図4に示すように不織布の一部を残してフラップの基端部8から自由縁6にわたってフィルムを貼合わせた複合シートのいずれであってもよい。

貼合わせの方法は、押出ラミネート法、ドライラミネート法、熱エンボスによる加圧溶融接着、ホットメルト接着剤による接合、超音波接合等いずれであってもよい。

【0016】

【考案の効果】

以上本考案により、排泄物の漏れがなく、着用者に不快感を与えず、肌触りが良好なサイドフラップを有する吸収性物品を提供することが可能となる。

【提出日】平成5年10月27日

【手続補正1】

【補正対象書類名】明細書

【補正対象項目名】0012

【補正方法】変更

【補正内容】

【0012】

吸収体4はフラッフパルプを主材に高吸収性ポリマーを併用したものが好ましく、その他吸収紙単体又は熱融着性繊維などの混合物や積層物が用いられる。吸収体の構造は砂時計型でも矩型でもよいが、砂時計型の方がより良好なフィット性を得られる。また上層にフラッフパルプ、下層にフラッフパルプと高吸収性ポリマーを混合又は積層し、ティッシュで包み込んだ積層構造とすることが好ましい。この場合の吸収体4は上層吸収体9は縦方向中央部の少なくとも股下部分において幅狭く砂時計型に形成し、下層吸収体10は上層吸収体の狭い幅と同幅の矩型をなすよう積層されていることが好ましい。

【手続補正2】

【補正対象書類名】明細書

【補正対象項目名】 0014

【補正方法】 変更

【補正内容】

【0014】

サイドフラップ5の液不透過性複合シートとしては、図3及び図4に示すように、肌触りを良くするための不織布12が脚周りの肌に触れる側に配置されるように、バックシート3よりも厚みが薄く柔らかいポリエチレンシート11などを内側につつみ込むように貼合わせた複合材が用いられる。この場合複合シートのポリエチレンシート11は $5\mu\text{m}$ 以上、 $20\mu\text{m}$ 未満で不織布12の目付は $10\sim 25\text{g}/\text{m}^2$ であることが必要である。

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CLAIMS

[Utility model registration claim]

[Claim 1] The absorber which intervened between a liquid permeability top sheet, liquid impermeability and a moisture permeability backseat, and both sheets, In the absorptivity goods which have extended outside from the longitudinal direction edges on both sides of this absorber, have the flap which turned up and joined the lengthwise direction both ends of the section by return on the absorber, and prepared the flexible elastic member in the flap free edge The side flap part which extends from the longitudinal direction edges on both sides of said absorber to this direction outside Said top sheet and said backseat are 5 micrometers of another object. It is 20 micrometers above. Absorptivity goods characterized by forming with the compound sheet of the impermeability sheet inner layer of the following, and the nonwoven fabric outer layer of eyes 10 - 25 g/m2.

[Translation done.]

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DETAILED DESCRIPTION

[Detailed explanation of a design]

[0001]

[Industrial Application]

This design is related with absorptivity goods, such as a diaper offered the object for sucklings, or for incontinentia persons, a pad, and a sanitary napkin.

[0002]

[Description of the Prior Art]

In the usage **** incontinentia protector or the diaper, while attaching an elastic member in the radial border of the side flap which extends in the direction of outside from the longitudinal direction edges on both sides of an absorber and turning up this side flap to a top face, what prepared the pocket which joins the lengthwise direction both ends of the clinch section, and **** excrement on longitudinal direction both sides is indicated by JP,3-57782,B. Moreover, the absorptivity goods which form a side flap from the aeration waterproofness sheet of another object with a top sheet and a backseat are indicated by JP,4-33848,Y.

[0003]

[Problem(s) to be Solved by the Device]

A usage **** incontinentia protector or a diaper given in JP,3-57782,B of the above-mentioned conventional technique etc. did not have perfect feeling of use, such as leakage prevention of excrement and the touch. Moreover, since the side flap is formed by the backseat made to extend besides an absorber and the sheet reinforcement which is equal to an intense motion of a user is required when the sheet plastic was used for the backseat and sheets, such as a nonwoven fabric, are compounded in order that a sheet plastic may touch the direct skin and the touch may improve the touch to this sheet plastic well, a sheet plastic ***** and displeasure is given. Moreover, since there are not permeability and moisture permeability, it is steamed and nothing is made about prevention.

[0004]

Moreover, although the side flap section is steamed and the improvement is made about prevention in the absorptivity goods which consist of the sheet which has the aeration waterproofness of another object with a top sheet and a backseat in the side flap given in JP,4-33848,Y, since nothing is made about the backseat which occupies a large area of the absorptivity goods, it is steamed substantially and the effectiveness of prevention is not accepted.

[0005]

Moreover, since the nonwoven fabric etc. is used in order to give permeability, the improvement the waterproofing effectiveness is inadequate and concerning leakage has not accomplished. In addition, since film reinforcement falls compared with the film which generally does not have permeability in using the film which has permeability, in order to maintain comparable film reinforcement, it is necessary to thicken a film, and a side flap *****, and displeasure is given to a user. This design aims at solving such a trouble.

[0006]

[Means for Solving the Problem]

In order to attain the above-mentioned purpose, this design of a top sheet and a backseat be thinner than the backseat of another object in the side flap section, and soft in it, and it be 5 micrometers

with the sufficient touch. It be 20 micrometers above. The side flap from which the outer layer which touch a user skin serve as a nonwoven fabric be form using a compound sheet with the impermeability sheet of the following, Eyes 10-25g/the nonwoven fabric of m2, and it be characterize by use a moisture permeability sheet for a backseat further.

[0007]

The absorber which intervened between a liquid permeability top sheet, liquid impermeability and a moisture permeability backseat, and both sheets when this design was explained to the detail, In the absorptivity goods which turn up on an absorber the side flap section which extends from the longitudinal direction edges on both sides of this absorber to this direction outside, have the flap which joined the lengthwise direction both ends of the clinch section, and prepared the flexible elastic member in the flap free edge Said top sheet and said backseat are 5 micrometers of another object about the side flap part which extends from the longitudinal direction edges on both sides of said absorber to this direction outside. It is 20 micrometers above. It forms with a compound sheet with the impermeability sheet of the following, Eyes 10-25g/the nonwoven fabric of m2.

[0008]

[Function]

In the absorptivity goods of this design of the above-mentioned configuration, while the longitudinal direction center section starts and a liquid impermeable side flap seals between a diaper wearer's bodies, it forms a small bag between the free edge of a side flap, and a flap end face part, and prevents leakage. Moreover, to a liquid impermeable side flap, it is thinner than a backseat, and a soft impermeability sheet is *****ed inside, and displeasure is not given to a wearer, without *****ing), since the good sheet of the touch currently formed considering the outside which touches a wearer's skin as a nonwoven fabric is used.

[0009]

[Example]

Although explained in more detail below with reference to the drawing in which the example of this design is shown, this design is not restricted at all by these examples.

Drawing 1 is a perspective view in the elongation condition of the absorptivity goods 1 shown in the example of this design. While the absorptivity goods 1 of drawing 1 extend to this direction outside from the longitudinal direction edges on both sides of the top sheet 2, a backseat 3, an absorber 4, and an absorber, the backseat which attached the elastic member contains the side flap 5 of another object. Drawing 2 is a perspective view in the free condition of the absorptivity goods of this design shown by drawing 1. Drawing 3 is the X-X' line sectional view of drawing 2.

[0010]

As shown in drawing 3 and drawing 4, it has extended outside from the side edge of the top sheet 2 and an absorber 4. Moreover, as shown in drawing 1 and drawing 2, the top sheet 2 and the backseat 3 have extended in this direction from the lengthwise direction both ends of an absorber 4, and have pasted up mutually the heel of the top sheet 2, and the heel of a backseat 3. As shown in drawing 3 and drawing 4, the liquid impermeable compound sheet of the side flap 5 is connected with a backseat 3 so that it may extend outside the side edge of an absorber. If it is left so that the side edge of an absorber 4 is met and are turned up on an absorber, and may join the lengthwise direction both ends of the clinch section, a flap may be formed, the flexible elastic member 7 may be arranged in the state of elongation to that flap free edge 6 and this flexible elastic member 7 may not be restrained The free edge 6 of a flap where the flexible elastic member 7 contracted freely, and the flexible elastic member 7 has been arranged serves as opening which starts from a end face 8, estranges from an absorber, and has gathers, and will form a small bag.

[0011]

The top sheet 2 used here uses the liquid permeability nonwoven fabric which consists of polyethylene, polypropylene, and other thermoplastic fiber.

The flexible elastic member 7 arranged in the free edge of a flap uses an urethane film, urethane yarn, urethane foam, yarn rubber, etc. Moreover, said flexible elastic member 7 is arranged in the state of elongation in the free edge of a flap, respectively, and adhesion immobilization is carried out with hot melt adhesive.

[0012]

In fluff pulp, what used the superabsorbency polymer together to the principal member is desirable, in addition, as for an absorber 4, mixture and laminated material, such as an absorbent-paper unit or thermal melting arrival nature fiber, are used. Although a sandglass mold or a ** type is sufficient as the structure of an absorber, a sandglass mold can obtain better fit nature. Moreover, it is desirable to make it as fluff pulp at the upper layer, to carry out a laminating and to make fluff pulp and a superabsorbency polymer into mixing or the laminated structure wrapped in tissue at a lower layer. the absorber 4 in this case -- the upper absorber 9 -- a lengthwise direction center section -- at least -- a length-from-the-crotch-to-the-cuff part -- setting -- width of face -- it forms in a sandglass mold narrowly and, as for the lower layer absorber 10, it is desirable that the laminating is carried out so that the ** type of the narrow width of face of the upper absorber and this width of face may be made.

[0013]

The liquid impermeability and moisture permeability polyethylene sheet which prepared the fine hole in the polyethylene sheet and gave moisture permeability to the backseat 3 are used. Moreover, it is [no fear of being steamed even if it uses the liquid impermeable sheet which added and extended the filler to thermoplastics and gave moisture permeability and permeability] and is comfortable. A backseat 5 is 20-40 micrometers. It is required to be thickness.

[0014]

lamination ***** is used so that it may see boiling the polyethylene sheet 11 with it etc. an inside side as a liquid impermeable compound sheet of the side flap 5 so that the nonwoven fabric 12 for improving the touch may be arranged at the side which touches the skin of the circumference of a foot as shown in drawing 3 and drawing 4 . [thin thickness and] [softer than a backseat 3] In this case, the polyethylene sheet 11 of a compound sheet is 5 micrometers. It is -20micrometer above. The eyes of a nonwoven fabric 12 need to be 10 - 25 g/m2 at the following.

[0015]

All over a nonwoven fabric inside, as drawing 3 shows, as you may be a lamination ***** sheet and a polyethylene film is shown in drawing 4 , the method of lamination of the polyethylene sheet 11 and the compound sheet of a nonwoven fabric 12 may leave some nonwoven fabrics, and may be any of a lamination ***** sheet about a film ranging from the end face section 8 to a free edge 6 of a flap. The approaches of lamination may be any, such as the extrusion laminating method, the dry laminate method, pressurization melting adhesion by heat embossing, junction by hot melt adhesive, and ultrasonic jointing.

[0016]

[Effect of the Device]

Above, by this design, there is no leakage of excrement, and displeasure is not given to a wearer, but it becomes possible to offer the absorptivity goods with which the touch has a good side flap.

[Filing Date] October 27, Heisei 5 [the procedure amendment 1]

[Document to be Amended] Specification [the subject name for amendment] 0012 -- [Method of Amendment] Modification [the contents of amendment]

[0012]

In fluff pulp, what used the superabsorbency polymer together to the principal member is desirable, in addition, as for an absorber 4, mixture and laminated material, such as an absorbent-paper simple substance or thermal melting arrival nature fiber, are used. Although a sandglass mold or a ** type is sufficient as the structure of an absorber, a sandglass mold can obtain better fit nature. Moreover, it is desirable to make it as fluff pulp at the upper layer, to carry out a laminating and to make fluff pulp and a superabsorbency polymer into mixing or the laminated structure wrapped in tissue at a lower layer. the absorber 4 in this case -- the upper absorber 9 -- a lengthwise direction center section -- at least -- a length-from-the-crotch-to-the-cuff part -- setting -- width of face -- it forms in a sandglass mold narrowly and, as for the lower layer absorber 10, it is desirable that the laminating is carried out so that the ** type of the narrow width of face of the upper absorber and this width of face may be made.

[Procedure amendment 2]

[Document to be Amended] Specification [the subject name for amendment] 0014 -- [Method of Amendment] Modification [the contents of amendment]

[0014]

lamination ***** is used so that it may see boiling the polyethylene sheet 11 with it etc. an inside side as a liquid impermeable compound sheet of the side flap 5 so that the nonwoven fabric 12 for improving the touch may be arranged at the side which touches the skin of the circumference of a foot as shown in drawing 3 and drawing 4 . [thin thickness and] [softer than a backseat 3] In this case, as for the eyes of a nonwoven fabric 12, the polyethylene sheet 11 of a compound sheet needs to be 10 – 25 g/m2 at 5 micrometers or more and less than 20 micrometers.

[Translation done.]

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TECHNICAL FIELD

[Industrial Application]

This design is related with absorptivity goods, such as a diaper offered the object for sucklings, or for incontinentia persons, a pad, and a sanitary napkin.

[0002]

[Translation done.]

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PRIOR ART

[Description of the Prior Art]

In the usage ***** incontinencia protector or the diaper, while attaching an elastic member in the radial border of the side flap which extends in the direction of outside from the longitudinal direction edges on both sides of an absorber and turning up this side flap to a top face, what prepared the pocket which joins the lengthwise direction both ends of the clinch section, and ***** excrement on longitudinal direction both sides is indicated by JP,3-57782,B. Moreover, the absorptivity goods which form a side flap from the aeration waterproofness sheet of another object with a top sheet and a backseat are indicated by JP,4-33848,Y.

[0003]

[Translation done.]

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EFFECT OF THE INVENTION

[Effect of the Device]

Above, by this design, there is no leakage of excrement, and displeasure is not given to a wearer, but it becomes possible to offer the absorptivity goods with which the touch has a good side flap.

[Filing Date] October 27, Heisei 5 [the procedure amendment 1]

[Document to be Amended] Specification [the subject name for amendment] 0012 — [Method of Amendment] Modification [the contents of amendment]

[0012]

In fluff pulp, what used the superabsorbency polymer together to the principal member is desirable, in addition, as for an absorber 4, mixture and laminated material, such as an absorbent-paper simple substance or thermal melting arrival nature fiber, are used. Although a sandglass mold or a ** type is sufficient as the structure of an absorber, a sandglass mold can obtain better fit nature. Moreover, it is desirable to make it as fluff pulp at the upper layer, to carry out a laminating and to make fluff pulp and a superabsorbency polymer into mixing or the laminated structure wrapped in tissue at a lower layer. the absorber 4 in this case -- the upper absorber 9 -- a lengthwise direction center section -- at least -- a length-from-the-crotch-to-the-cuff part -- setting -- width of face -- it forms in a sandglass mold narrowly and, as for the lower layer absorber 10, it is desirable that the laminating is carried out so that the ** type of the narrow width of face of the upper absorber and this width of face may be made.

[Procedure amendment 2]

[Document to be Amended] Specification [the subject name for amendment] 0014 — [Method of Amendment] Modification [the contents of amendment]

[0014]

lamination ***** is used so that it may see boiling the polyethylene sheet 11 with it etc. an inside side as a liquid impermeable compound sheet of the side flap 5 so that the nonwoven fabric 12 for improving the touch may be arranged at the side which touches the skin of the circumference of a foot as shown in drawing 3 and drawing 4 . [thin thickness and] [softer than a backseat 3] In this case, as for the eyes of a nonwoven fabric 12, the polyethylene sheet 11 of a compound sheet needs to be 10 - 25 g/m2 at 5 micrometers or more and less than 20 micrometers.

[Translation done.]

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TECHNICAL PROBLEM

[Problem(s) to be Solved by the Device]

A usage ***** incontinencia protector or a diaper given in JP,3-57782,B of the above-mentioned conventional technique etc. did not have perfect feeling of use, such as leakage prevention of excrement and the touch. Moreover, since the side flap is formed by the backseat made to extend besides an absorber and the sheet reinforcement which is equal to an intense motion of a user is required when the sheet plastic was used for the backseat and sheets, such as a nonwoven fabric, are compounded in order that a sheet plastic may touch the direct skin and the touch may improve the touch to this sheet plastic well, a sheet plastic ***** and displeasure is given. Moreover, since there are not permeability and moisture permeability, it is steamed and nothing is made about prevention.

[0004]

Moreover, although the side flap section is steamed and the improvement is made about prevention in the absorptivity goods which consist of the sheet which has the aeration waterproofness of another object with a top sheet and a backseat in the side flap given in JP,4-33848,Y, since nothing is made about the backseat which occupies a large area of the absorptivity goods, it is steamed substantially and the effectiveness of prevention is not accepted.

[0005]

Moreover, since the nonwoven fabric etc. is used in order to give permeability, the improvement the waterproofing effectiveness is inadequate and concerning leakage has not accomplished. In addition, since film reinforcement falls compared with the film which generally does not have permeability in using the film which has permeability, in order to maintain comparable film reinforcement, it is necessary to thicken a film, and a side flap ***** and displeasure is given to a user. This design aims at solving such a trouble.

[0006]

[Translation done.]

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MEANS

[Means for Solving the Problem]

In order to attain the above-mentioned purpose, this design of a top sheet and a backseat be thinner than the backseat of another object in the side flap section, and soft in it, and it be 5 micrometers with the sufficient touch. It be 20 micrometers above. The side flap from which the outer layer which touch a user skin serve as a nonwoven fabric be form using a compound sheet with the impermeability sheet of the following, Eyes 10-25g/the nonwoven fabric of m2, and it be characterize by use a moisture permeability sheet for a backseat further.

[0007]

The absorber which intervened between a liquid permeability top sheet, liquid impermeability and a moisture permeability backseat, and both sheets when this design was explained to the detail, In the absorptivity goods which turn up on an absorber the side flap section which extends from the longitudinal direction edges on both sides of this absorber to this direction outside, have the flap which joined the lengthwise direction both ends of the clinch section, and prepared the flexible elastic member in the flap free edge Said top sheet and said backseat are 5 micrometers of another object about the side flap part which extends from the longitudinal direction edges on both sides of said absorber to this direction outside. It is 20 micrometers above. It forms with a compound sheet with the impermeability sheet of the following, Eyes 10-25g/the nonwoven fabric of m2.

[0008]

[Translation done.]

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OPERATION

[Function]

In the absorptivity goods of this design of the above-mentioned configuration, while the longitudinal direction center section starts and a liquid impermeable side flap seals between a diaper wearer's bodies, it forms a small bag between the free edge of a side flap, and a flap end face part, and prevents leakage. Moreover, to a liquid impermeable side flap, it is thinner than a backseat, and a soft impermeability sheet is ****ed inside, and displeasure is not given to a wearer, without *****(ing), since the good sheet of the touch currently formed considering the outside which touches a wearer's skin as a nonwoven fabric is used.

[0009]

[Translation done.]

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EXAMPLE

[Example]

Although explained in more detail below with reference to the drawing in which the example of this design is shown, this design is not restricted at all by these examples.

Drawing 1 is a perspective view in the elongation condition of the absorptivity goods 1 shown in the example of this design. While the absorptivity goods 1 of drawing 1 extend to this direction outside from the longitudinal direction edges on both sides of the top sheet 2, a backseat 3, an absorber 4, and an absorber, the backseat which attached the elastic member contains the side flap 5 of another object. Drawing 2 is a perspective view in the free condition of the absorptivity goods of this design shown by drawing 1. Drawing 3 is the X-X' line sectional view of drawing 2.

[0010]

As shown in drawing 3 and drawing 4, it has extended outside from the side edge of the top sheet 2 and an absorber 4. Moreover, as shown in drawing 1 and drawing 2, the top sheet 2 and the backseat 3 have extended in this direction from the lengthwise direction both ends of an absorber 4, and have pasted up mutually the heel of the top sheet 2, and the heel of a backseat 3. As shown in drawing 3 and drawing 4, the liquid impermeable compound sheet of the side flap 5 is connected with a backseat 3 so that it may extend outside the side edge of an absorber. If it is left so that the side edge of an absorber 4 is met and are turned up on an absorber, and may join the lengthwise direction both ends of the clinch section, a flap may be formed, the flexible elastic member 7 may be arranged in the state of elongation to that flap free edge 6 and this flexible elastic member 7 may not be restrained The free edge 6 of a flap where the flexible elastic member 7 contracted freely, and the flexible elastic member 7 has been arranged serves as opening which starts from a end face 8, estranges from an absorber, and has gathers, and will form a small bag.

[0011]

The top sheet 2 used here uses the liquid permeability nonwoven fabric which consists of polyethylene, polypropylene, and other thermoplastic fiber.

The flexible elastic member 7 arranged in the free edge of a flap uses an urethane film, urethane yarn, urethane foam, yarn rubber, etc. Moreover, said flexible elastic member 7 is arranged in the state of elongation in the free edge of a flap, respectively, and adhesion immobilization is carried out with hot melt adhesive.

[0012]

In fluff pulp, what used the superabsorbency polymer together to the principal member is desirable, in addition, as for an absorber 4, mixture and laminated material, such as an absorbent-paper unit or thermal melting arrival nature fiber, are used. Although a sandglass mold or a ** type is sufficient as the structure of an absorber, a sandglass mold can obtain better fit nature. Moreover, it is desirable to make it as fluff pulp at the upper layer, to carry out a laminating and to make fluff pulp and a superabsorbency polymer into mixing or the laminated structure wrapped in tissue at a lower layer. the absorber 4 in this case -- the upper absorber 9 -- a lengthwise direction center section -- at least -- a length-from-the-crotch-to-the-cuff part -- setting -- width of face -- it forms in a sandglass mold narrowly and, as for the lower layer absorber 10, it is desirable that the laminating is carried out so that the ** type of the narrow width of face of the upper absorber and this width of face may be made.

[0013]

The liquid impermeability and moisture permeability polyethylene sheet which prepared the fine hole in the polyethylene sheet and gave moisture permeability to the backseat 3 are used. Moreover, it is [no fear of being steamed even if it uses the liquid impermeable sheet which added and extended the filler to thermoplastics and gave moisture permeability and permeability] and is comfortable. A backseat 5 is 20-40 micrometers. It is required to be thickness.

[0014]

lamination ***** is used so that it may see boiling the polyethylene sheet 11 with it etc. an inside side as a liquid impermeable compound sheet of the side flap 5 so that the nonwoven fabric 12 for improving the touch may be arranged at the side which touches the skin of the circumference of a foot as shown in drawing 3 and drawing 4 . [thin thickness and] [softer than a backseat 3] In this case, the polyethylene sheet 11 of a compound sheet is 5 micrometers. It is -20micrometer above. The eyes of a nonwoven fabric 12 need to be 10 - 25 g/m2 at the following.

[0015]

All over a nonwoven fabric inside, as drawing 3 shows, as you may be a lamination ***** sheet and a polyethylene film is shown in drawing 4 , the method of lamination of the polyethylene sheet 11 and the compound sheet of a nonwoven fabric 12 may leave some nonwoven fabrics, and may be any of a lamination ***** sheet about a film ranging from the end face section 8 to a free edge 6 of a flap. The approaches of lamination may be any, such as the extrusion laminating method, the dry laminate method, pressurization melting adhesion by heat embossing, junction by hot melt adhesive, and ultrasonic jointing.

[0016]

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] The perspective view in the elongation condition of the goods of this design

[Drawing 2] The perspective view in the free condition of the goods of this design

[Drawing 3] X-X-ray sectional view of drawing 2

[Drawing 4] The sectional view of another example of the goods of this design

[Description of Notations]

1: Absorptivity goods

2: Top sheet

3: Backseat

4: Absorber

5: Side flap

6: Side flap free edge

7: Flexible elastic member

8: Side flap end face section

9: The upper absorber

10: Lower layer absorber

11: The impermeability sheet of the side flap section

12: The nonwoven fabric of the side flap section

[Translation done.]

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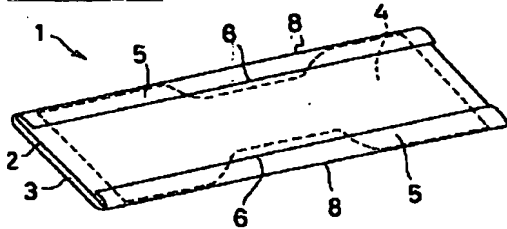
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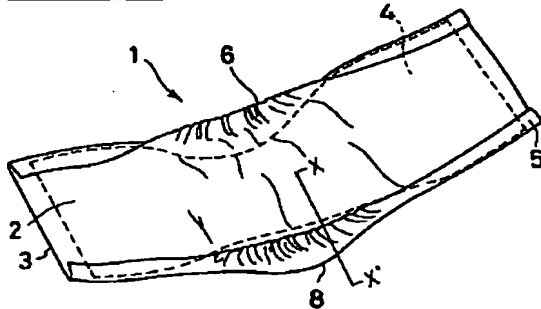
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DRAWINGS

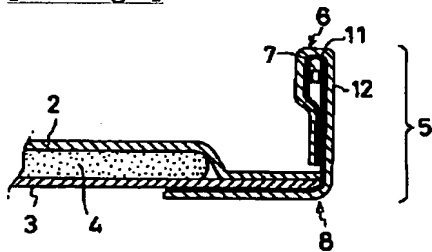
[Drawing 1]



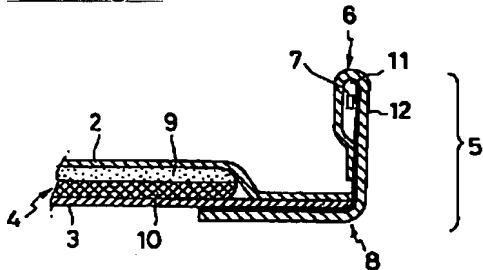
[Drawing 2]



[Drawing 3]



[Drawing 4]



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WRITTEN AMENDMENT

----- [a procedure revision]

[Filing Date] October 27, Heisei 5

[Procedure amendment 3]

[Document to be Amended] Specification

[Item(s) to be Amended] drawing 3

[Method of Amendment] Modification

[Proposed Amendment]

[Drawing 3] The X-X' line sectional view of drawing 2

[Translation done.]